

WHAT IS CLAIMED IS:

1. An image data processor for converting first image data into second image data, comprising:

5 a memory for storing pixel data corresponding to a target pixel to be processed within the first image data and pixel data corresponding to a plurality of peripheral pixels adjacent to the target pixel within the first image data;

 a histogram circuit for generating a histogram of a brightness
10 distribution of the pixel data stored in the memory; and

 a data processor circuit for replacing the pixel data of the target pixel with a value determined based on a maximum value of the histogram and for outputting the processed data; wherein

 the output of the data processor circuit is the second image
15 data.

2. The image data processor according to Claim 1, wherein

 the second image data is image data for displaying a replay image in which a special effect processing is applied to the first
20 image data.

3. The image data processor according to Claim 1, further comprising:

 an extractor circuit for extracting predetermined bits of the pixel data stored in the memory circuit, wherein

25 the histogram circuit reads the predetermined bits of the pixel data extracted by the extractor circuit and generates the histogram.

4. The image data processor according to Claim 3, further comprising:

 a digit-complementing circuit for multiplying the output of

the data processor circuit by a predetermined multiplier to complement the bits of the output of the data processor circuit so that the number of bits of the output becomes identical to the number of bits of the pixel data.

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5. The image data processor according to Claim 1, further comprising:

a color data generator circuit for reading the second image data and generating color data; and

a color gain circuit for providing a predetermined gain to
10 the color data, wherein

the color gain circuit sets the gain for color data of the target pixel to zero.

6. The method for processing image data to convert first image data
15 to second image data, the method comprising the steps of:

storing, in a memory, pixel data corresponding to a target pixel to be processed in the first image data and pixel data corresponding to a plurality of peripheral pixels adjacent the target pixel in the first image data;

20 generating a histogram of a brightness distribution of the pixel data stored in the memory; and

replacing the pixel data of the target pixel with a value determined based on a maximum value of the histogram and outputting the second image data.

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7. The method for processing image data according to Claim 6, wherein

the second image data is image data for displaying a replay image in which a special effect processing is applied to the first image data.

8. The method for processing image data according to Claim 6, further comprising the steps of:

extracting predetermined bits of the pixel data stored in the
5 memory; and

reading the predetermined extracted bits of the pixel data
and generating the histogram.

9. The method for processing image data according to Claim 8, further
10 comprising:

a digit-complementing step for multiplying the replaced pixel
data of the target pixel by a predetermined multiplier to complement
the bits so that the number of bits becomes identical to the number
of bits of the pixel data.

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10. The method for processing image data according to Claim 6, further
comprising the step of:

generating brightness data and color data based on the second
image data, wherein

20 a gain for the color data of the target pixel is set to zero
when the color data is generated.